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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/801,290 | 03/15/2004 | Ichiro Fujimori | 13912US05 | 3052 |

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EXAMINER

CAO, PHAT X

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| ART UNIT | PAPER NUMBER |
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2814

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/801,290 | Applicant(s) FUJIMORI, ICHIRO | |
| | Examiner Phat X. Cao | Art Unit 2814 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 7 is objected to because of the following informalities: in claim 7, line 1, "said body" should be changed to "a body". Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-12 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 and 6-9 of copending application No. 10/294,880. Although the conflicting claims are not identical, they are not patentably distinct from each other because: both applications claim a system for reducing noise in a chip comprising a second well and a third well disposed within a first well, a first transistor disposed in the second well, a second transistor disposed in the third well, and a quiet voltage source connected to a body of the first transistor. Moreover, the claims in the instant application are either broader versions of the claims in copending application 10/294,880 or are obvious variations thereof. Eventhough

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claim 1, for example of the instant application does not use exactly the same word, for example, "a second well and a third well that are both disposed within said first well", and the copending application recites "a second well disposed within the first well, ... , a third well disposed within the first well", that shows no different meaning between these two elements. The facts are that the claims of the copending application have claimed the same goal and are not distinguished from each other.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1 and 5-12 are rejected under 35 U.S.C. 102(e) as being anticipated by McCormack et al (US. 6,395,591).

Regarding claims 1, 5, 8 and 9, McCormack (Fig. 2) discloses a system for

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reducing noise in a chip, the system comprising: a substrate 10 doped with a first dopant; a first well 12 disposed on top of the substrate; a second well 18 and a third well 22 or 16 that are both disposed within the first well 12; a first transistor 29 disposed in the second well 18; a quiet voltage source 26 (column 3, lines 50-55) connected to a body of the first transistor 29; and a second transistor 30 or 28 disposed in the third well 12; wherein the body 19 of the first transistor 29 having a conductivity of P type which is resistively coupled to the second well 18 also having a conductivity of p type, and wherein the first well 12 is a deep well.

Regarding claim 6, if assuming the second transistor is the transistor 28, then the second transistor 28 comprises a noisy voltage source 24 (column 3, lines 60-65), wherein a body 17 and a source of the second transistor 28 are both coupled to the noisy voltage source.

Regarding claim 7, if assuming the second transistor is the transistor 30, then the N type body 22 of the second transistor 30 is capacitively coupled to the substrate by the first well 12 made of P type conductivity.

Regarding claims 10-12, if assuming that a first dopant is a N type and a second dopant is a P type, then McCormack also discloses the first well 12 doped with a second dopant (P), the second well 18 doped with a second dopant (P), and the third well 22 doped with a first dopant (N).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack et al in view of Vinal (US. 5,151,759).

As discussed above, McCormack discloses the first transistor 29 being a NMOS and the second transistor 30 being a PMOS transistor. McCormack does not disclose the first transistor being a PMOS and the second transistor being a NMOS.

However, Vinal teaches the converting of a NMOS transistor to a PMOS transistor by exchanging N for P and P for N (column 34, lines 41-47). Accordingly, it would have been obvious to convert the first transistor 29 from a NMOS to a PMOS and the second transistor 30 from a PMOS to a NMOS because as taught by Vinal, the NMOS transistor device is analogous to the PMOS transistor device, with the device operational polarity and doping types reversed.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack et al in view of Puar et al (US. 6,356,497).

McCormack does not disclose a noisy voltage source coupled to a source of the first transistor 29.

However, Puar (Fig. 5) teach a system for reducing noise in a chip by connecting a noisy voltage source 38 to a source of the transistor and a quiet voltage source VDD to a body (N+) of the transistor (column 4, lines 59-65). Accordingly, it would have been obvious to connect the source of the first transistor 29 of McCormack to a noisy voltage

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source (i.e., external devices) in order to receive/transmit the data from the transistor to the external devices.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phat X. Cao whose telephone number is (571) 272-1703. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PC
August 5, 2004


PHAT X. CAO
PRIMARY EXAMINER